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| **Unit 10: Imperfect Competition** | |
|  | | **Learning Objectives:** |
|  | | At the end of this unit you should be able to explain:   * the concept of imperfect competition * the differences between two types of imperfect competition * why monopolistically-competitive firms tend to have excess capacity and are unlikely to earn long-run economic profits * why oligopoly firms often do not engage in competitive pricing * why large firms are often tempted to collude and form cartels * understand the concept of the kinked demand curve |
|  | | **Learning Materials:** |
|  | | * Chapter 11  - Principles of Microeconomics |
|  | | **Overview of this Unit** |
|  | | The theoretical extremes of market structures tend to be harder to find in reality than they are in textbooks. Purely competitive and monopolistic environments are as much to frame what lies in between as anything else. Monopolistic competition and Oligopolies are more realistic portrayals of how our economy actually works. Examples of each of these can be found all over! In this unit we will look at imperfect competition in monopolistic competitive and Oligopoly environments, define them, and discuss the types of environments in which they usually operate. |
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EC1100 Microeconomics - PT (CL) - Unit 10.  Imperfect Competition -    The Concept of Imperfect Competition

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| **Unit 10 - Topic 1 - The Concept of Imperfect Competition** |
| Imperfect competition occurs when an individual firm, by virtue of its size relative to the market, has some degree of control (but not complete control) over the industry, the quantity supplied or the price.  In Canada, retails newest kid on the block, Wal-mart, accounts for over 30% of total retail sales.  Canadian Tire too has a large chunk of the market along with other industry giants as Loblaw’s (Dominion) and Sobey’s. Are they operating in a perfectly competitive market?  The short answer is “No they are definitely not!”  Firms operating in such an environment tend not to compete so much on price.  Rather, these firms often try to carve a piece of the consumers mind by making them stand out relative to their competitors.  The most common way that this is done is through Product differentiation, which by definition is the attempt by a firm to distinguish its product from that of its competitors by doing such things as; developing a recognized brand name, product logo, or packaging, securing a superior location or developing a reputation for exceptional service, engaging in product redevelopment and improvement, or developing an effective advertising strategy.  Such strategies often involve using key marketing tools as advertising and promotions. |

EC1100 Microeconomics - PT (CL) - Unit 10.  Imperfect Competition -    Monopolistic Competition

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| **Unit 10 - Topic 2: Monopolistic Competition** |
| A Monopolistically competitive market structure is said to occur in a market that has many firms who sell a differentiated product and have some control over the price of the products they sell. A consumer/buyer can substitute one product for another in order to meet his or her needs.  A classic example of a monopolistically competitive industry was the snowmobile industry in the 1960s. During that decade the North American economy was healthy and snowmobile sales took off.  By the end of that decade more than 100 manufacturers entered the market.  Annual industry sales rose from 229 machines in 1960 to over 255,000 in 1970 (Source: [Bombardier Museum](http://www.fjab.qc.ca/en/content/motoneige/hautetbasdelindustrie.htm))  That monopolistically competitive industry had four of the key characteristics of such a market structure:  **The industry was comprised of many small firms:** With over 100 firms vying for market share, no one firm dominated although some, like Bombardier, were larger than others.  **Freedom of entry (and exit):** Many manufacturers of other well known products like John Deere and Evenrude entered the marketplace with their own offerings of snowmobiles during the 1960s.   With higher oil prices and the subsequent downturn in the industry in the mid 1970s through the 1980s the field of manufactures narrowed to five.  **Some control over price:** Manufacturers in such competitive environments still have some degree over price because the number of manufactures relative to available buyers is still small.  **Differentiated products:** Competitors in such an industry focus more on product development, innovation and marketing to differentiate their product from others.   |  |  | | --- | --- | | **Monopolistic Competition** | | | **Number of Sellers** | **Many** | | **Type of Product** | **Substitutable (e.g., Powdered milk vs. whole milk)** | | **Ease of Market entry and exit** | **Easy** | | **Sellers control over Price** | **Low** | | **Example Industries** | **Convenience Stores** | |

EC1100 Microeconomics - PT (CL) - Unit 10.  Imperfect Competition -    Long Run Profitability

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| **Unit 10 - Topic 3: Long Run Profitability of a Monopolistically Competitive Market** |
| Because there is no dominant player in a Monopolistically competitive market, new entrants tend to be drawn to it because of the opportunity to capture a share of that market. This was evidenced in the snowmobile industry of the 1960s when over 100 firms flocked to the market to capture their share of a rapidly growing industry.  With so many firms all seeking a share of a market this tends to lead to a condition of too much product being produced (excess capacity) which forces down prices and profits. In the long run, firms in such an industry are unlikely to earn economic profits.   In the snowmobile industry this was proven out in the 1970s and 80s.   Higher gas prices combined with a saturation of the market lead many snowmobile manufactures to bankruptcy (Artic Cat for example went bankrupt only to reemerge as an employee owned company).  Others simply got out of the unprofitable business (e.g. John Deere).  Companies such as Bombardier and Yamaha survived but only because the companies expanded into other lines of business. |

EC1100 Microeconomics - PT (CL) - Unit 10.  Imperfect Competition -    The Oligopoly

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| **Unit 10 - Topic 4: The Oligopoly** |
| An Oligopoly is said to exist when a few large firms dominate a market.  Oligopolies are most similar to a monopoly, however unlike a monopoly there is choice — consumers can chose to buy from amongst a limited number of suppliers.  **Oligopoly Industries share these key characteristics described below:**  **Bigness:** Many of the large companies that we are so familiar with can be considered Oligopolies. Major car companies and major airlines serve as excellent example of oligopolies. Their numbers are relatively few and their respective size is large.  **New firms find it difficult to enter the industry:** Oligopolies normally exist in industries that require bigness (economies of scale) through large investments of capital, natural resources and talent, such as the automotive industry or the airline industry.  Because of this size requirement, high barriers to entry make it very difficult for a new firm to enter into such an industry.  **Competition is based on other things rather than price:** Oligopoly type industries are made up of a few firms that try very hard to differentiate themselves from one another. These firms focus on Non-price factors such as service.  In the airline business for example prices for flights tend to be similar among the various companies, so rather than focus on price they usually advertise based on the services that they offer more frequent flights, more direct flights, more destinations, more leg room or leather seats.  **Each firm has significant control over its price:** Because there are relatively few firms, and because competition is based on factors other than price oligopoly type firms have a larger degree of control over the prices that they charge.  **Mutual interdependence of firms in the industry:** There are such few firms, that it is relatively easy for one to monitor the pricing and products of another.  If one firm drops its price the others usually follow. If one firm introduces a new product the other quickly follows with its own.   |  |  | | --- | --- | | **Oligopoly** | | | **Number of Sellers** | **Few** | | **Type of Product** | **Similar** | | **Ease of Market entry and exit** | **Difficult** | | **Sellers control over Price** | **Substantial** | | **Example Industries** | **Car Companies; Cell phone providers** | |

EC1100 Microeconomics - PT (CL) - Unit 10.  Imperfect Competition -    The Cartel

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| **Unit 10 - Topic 5: Cartels** |
| As we have discussed in the previous section, there is only a limited amount of price competition amongst oligopoly firms.  Additionally one firm's actions are closely watched and often followed by another's.  Such conditions make it very enticing for firms in the industry to work together rather than compete.  When firms in an oligopoly work together to act like a monopoly to drive up prices it is known as collusion and collusion is illegal in North America.  When firms in an oligopoly industry collude they effectively create what is known as a Cartel. The Organization of Petroleum Exporting Countries (OPEC) is an example of such a cartel. In 1973 [OPEC](http://www.opec.org/home/) banded together some major oil producing countries to limit the supply of oil on the world market.  Because the demand for oil was inelastic (in the short run) prices skyrocketed!   As long as there is no cheating amongst the members of the cartel prices can remain elevated and reap great windfalls on the members.  Cheating is a great temptation because of the opportunity to make more money by an individual firm or member so cartels tend not to last in the long run. |

EC1100 Microeconomics - PT (CL) - Unit 10.  Imperfect Competition -    Price Leadership

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| **Unit 10 - Topic 6: Price Leadership in Oligopoly Industries** |
| Price leadership is a variant on the cartel concept. In the situation of price leadership one firm in the industry takes a leadership role on pricing. This means that this leadership firm will have slightly lower prices than its competitors on a select group of items. The other firms in the industry concede this and closely monitor the long term pricing of others to ensure no one firm has an advantage over the other. In the airline industry, for example, certain airlines offer lower prices on charters while others offer lower prices on some other aspect of the business such as business travel. The net effect is that all firms in the industry benefit from these arrangements. |

EC1100 Microeconomics - PT (CL) - Unit 10.  Imperfect Competition -    The Kinked Demand Curve

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| **Unit 10 - Topic 7: The Kinked Demand Curve** |
| We have seen that there are times that there is competition amongst oligopoly firms and at other times there is cooperation. At what point do cooperating firms begin to compete? And what happens at this point? Those are the basic questions that underlie a key economic concept known as the Kinked Demand Curve. The kinked demand curve is actually two demand curves.  Let's take the example of an airline to better illustrate the kinked demand curve. Kink Air is one of a half dozen airlines serving the city of Bend. Traditionally all of the airlines serving Bend have competed on non-price factors Bend for example, offers snacks on its flights while the others do not. Bend is contemplating raising its prices 10%. It reasons that if it does, the other airlines may not raise their prices Bend therefore will lose customers and its revenues will drop. In economic terms, prices above Bends current price will create an elastic demand for flights. (This will create a flatter, more horizontal, demand curve above Bends current price.)  If on the other hand, to secure more customers Bend decided to drop its prices by 10%, its rivals would be much more inclined to follow suit and drop their prices accordingly. **So would Bend attract new customers? Probably not.** In fact revenues would fall because of the lower prices. In economic terms, prices below the current price face an inelastic demand a much steeper, more vertical demand curve. |

EC1100 Microeconomics - PT (CL) - Unit 10.  Imperfect Competition -    Are Oligopolies Efficient?

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| **Unit 10 - Topic 8: Are Oligopolies Efficient?** |
| There is much debate amongst economists as to whether oligopolies are inefficient?  Some believe that oligopolies are too powerful and produce inefficiently while others take the view that oligopolies are at the cutting edge of new technology development and, in the long-run, push the average costs of production down.  The debate rages! |
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EC1100 Microeconomics - PT (CL) - Unit 10.  Imperfect Competition -    Interactive Graph - Imperfect Competition

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| **Unit 10: Interactive Graph - Imperfect Competition** |
| **Graphing Exercise: Monopolistic Competition**  Monopolistic competition is characterized by a large number of firms producing goods or services that are differentiated from one another. Entry of new firms into the industry is relatively unrestricted. As a result, the typical firm will earn no economic profit in the long run.  **Exploration: What are the characteristics of long-run equilibrium in a competitive industry?** |

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| This graph illustrates the demand and cost conditions for a typical firm in a monopolistically competitive industry. Its demand curve is downward sloping to reflect the monopoly power owing to its differentiated product. The firm can raise its price without losing all its sales to rival firms. To use the graph, use the mouse to drag the demand curve; clicking on the Adjust button will illustrate how the market and firm respond to restore long-run equilibrium. The Show Profit button will illustrate any short-run profits available to the firm. |

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| **Self Quiz** | | |
| ***1.*** | Given the initial demand and cost conditions, what output level and price will maximize the firm's profit? What profit level can the firm attain? | Show Answer |
| ***2.*** | Suppose demand for the products made by this industry increases. How will this firm respond in the short run? Will its profits increase in the short run? | Show Answer |
| ***3.*** | In response to an increase in industry demand, how will this firm respond in the long run? Will its profits increase in the long run? | Show Answer |
| ***4.*** | Experiment on your own. How would the firm and industry respond to a decline in demand in both the short and long run? What generalization can you make? | Show Answer |
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| Economic growth allows for expanded choices: larger quantities of both pizzas and robots become attainable with either advances in technology or the availability of greater resources. One way that greater resources may become available is by choosing to use some of society's currently available resources to invest in the future-for example, by spending on education or research, or by producing capital goods.  The amount of resources available to an economy at some future point depends upon the choices it makes today. To use the graph, use the mouse to drag the scroll bar button to the left or right, observing the impact of different choices on the future position of the production possibilities curve.  **Discussion Board Posting for Unit Ten: *Imperfect Competition***  Imperfect competition exists in many markets. The snowmobile market provides an excellent example of the theory of imperfect competition in action. Visit the J. Armand Bombardier Museum web site (<http://www.fjab.qc.ca/en/content/motoneige/hautetbasdelindustrie.htm>) and go to the page entitled "Evolution of the Industry."  On the page entitled "Industry Highs and Lows" click through the timeline to understand how the industry has changed in the past 40 years. Discuss the industry features discussed on this page as they relate to the material covered in this unit on imperfect competition.  By Wednesday, go to the Discussion Board and post your response. Respond to at least one other posting by Saturday.  **Note:** Respond to the topic “*Unit Ten: Imperfect Competition*” |

EC1100 Microeconomics - PT (CL) - Unit 10.  Imperfect Competition -    Summary

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| **Unit 10 - Summary** |
| In this unit we have studied two market structures that together are classified as Imperfect Competition Monopolistic Competition and Oligopolies. Monopolistic competition is a relatively common structure where many firms compete on the basis of offering substitutes. Separating the various offerings in the consumer's mind is accomplished by product differentiation communicated through marketing activities.  The oligopoly too is a common market structure as well and usually can be found in large industries.  Firms operating in an oligopoly environment are concentrated and often work closely, by design (as a Cartel) or by necessity (price Leadership). |